

EXPLORATION TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

March 30, 2004

TO: Internal File

THRU: Peter H. Hess, Environmental Scientist /Engineering, Inspector, Team Lead

FROM: Jerriann Ernstsens, Ph.D., Environmental Scientist/Biology

RE: Minor Coal Exploration – SITLA Muddy Tract, Canyon Fuel Company, LLC.,
SUFCO Mine, C/041/002, Task #1835

SUMMARY:

The Division received the Notice of Intention on February 10, 2004 that addresses the minor coal exploration drilling of a single hole. This memo reviews the biology and archeology sections of the Notice.

The Permittee plans to use helicopter-assisted wireline core-drill system for drill hole A in 2004. The plan shows that the drill hole is located within the proposed SITLA Muddy Coal Tract (SMCT). The operator will reach the staging site using USFS roads 007 and 044, then transport equipment to the drill hole site using the helicopter.

EXPLORATION TECHNICAL ANALYSIS:

COMPLIANCE DUTIES

Regulatory Reference: 30 CFR 772.13; R645-202.

OPERATIONAL STANDARDS

Regulatory Reference: 30 CFR 772.13; R645-202-100.

Analysis:

The Permittee plans to use helicopter-assisted wireline core-drill system for drill hole A in 2004. Drill hole A is near the north central edge of the SMCT in section 32.

There is no cultural and historic evaluation that focuses on the SMCT. The Notice states that the area has been evaluated during the EIS process. The study of focus for the EIS (1999), however, only included sites within the Pines coal lease, Quitchumpah 150-acre lease modification, Box Canyon amendment, northern portion of Link canyon, and Muddy Creek Canyon. The Division could not find specific reference to the “Muddy Creek Canyon” on the topo-map. Irrespective, the Muddy Creek is much farther north than the proposed drill hole A.

The Division cannot sufficiently determine the adequacy of the exploration project as it pertains to cultural and historic sites without representative data and descriptions of protective measures. The Permittee plans to conduct a site-specific historic and cultural survey during spring 2004. The Permittee must include a description of the measures that will protect potential or observed cultural and historic sites. (R645-201.225).

Biology

The Division has concerns for elk and deer populations. DWR wildlife map shows that the drill hole site is in elk and deer critical ranges. The Permittee plans to drill in the third week of July 2004/2005, which follows the calving exclusionary period (May 15 through July 5). The Division believes that the exploration project will not impact these ungulate populations because of the project-time schedule.

There is no raptor evaluation that covers the SMCT. The Division is concerned that exploration and reclamation operations could disturb nesting raptors. The Notice mentions that there is a large escarpment near the drill site. The Division does not know whether there are nesting sites on this escarpment. Helicopter exploration operations for this project will occur within the raptor exclusionary time frame (approximately January 1 through August 31). The Permittee must conduct a raptor survey if the flight path of the helicopter is within potential habitat (R645-202.231). This survey will reveal if birds are nesting in the area of concern. If birds are nesting near the sites, the Division will coordinate with DWR to determine what measures the Permittee must take to minimize impact. The Permittee must include a description of the measures that will protect observed raptors and nests. (R645-201.225).

There is no threatened, endangered, or sensitive (TES) species survey for the disturbed area. The Notice mentions that bald eagles, peregrine falcons (no longer listed), and sage grouse are likely to exist within the exploration area. DWR shows that the area may also have Northern Goshawk and the three-toed woodpecker.

EXPLORATION TECHNICAL MEMO

The Division cannot sufficiently determine the adequacy of the exploration project as it pertains to TES without representative data and descriptions of protective measures. The Permittee must conduct TES surveys if potential habitats including Mexican Spotted Owl habitat are within or adjacent to the area of surface disturbance (R645-202.231). The Permittee plans to conduct a site-specific TES survey during spring 2004. The Division recommends that the Permittee conduct TES plant surveys when species are clearly identifiable. The Permittee must include a description of the measures that will protect potential or observed TES species (R645-201.225).

The Permittee mentioned that drilling will include pumping water from Muddy or Quitchumpah Creek. The Permittee shows the anticipated volume of extracted water during the drilling operations will be no more than 0.5-acre feet. This volume of water will impact the four Colorado River endangered fish species (USFWS): the Colorado pikeminnow, the humpback chub, the bonytail chub, and the razorback sucker. However, the volume is below the threshold volume (100-acre feet per year) that necessitates mitigation.

Findings:

The Division considers the information inadequate to meet the minimum requirements of the Biology section of the Operational Standards regulations. Prior to approval, the Permittee must act in accordance with the following:

R645-201-225, 1) The Permittee must conduct a site-specific cultural and historic survey. The Permittee must include a description of the measures that will protect potential or observed cultural and historic sites. 2) The Permittee must include a description of the measures that will protect observed raptors and nests. 3) The Permittee needs to reassess potential TES species or habitat, including the Mexican Spotted Owl, within the disturbed site. The Permittee must include a description of the measures that will protect TES species and their habitats from the proposed project (also R645-202.231).

R645-202-231, The Permittee must conduct raptor surveys to assess existing nests and potential raptor habitat within the SDCT project area.

RECLAMATION STANDARDS

Regulatory Reference: 30 CFR 772.13; R645-202-200.

Analysis:

Revegetation

The Notice mentions that drill hole A is within a mountain brush plant community consisting primarily of oak, service berry, and mountain mahogany. The Division could not find a vegetation survey that specifically lists the species within the SMCT (Notice or SUFCO MRP).

The Permittee plans to immediately recontour and seed the 0.002-acre disturbed site approximately four weeks following the start of the drilling project. The Division recommends that the Permittee recontour the site, but omit the seeding portion of the plan. The size of disturbance is so small that natural invasion by the native plant species should quickly stabilize the site.

The Permittee will use a mix that the USFS developed if the Permittee insists on reseeding the site. This mix includes natives to Utah and many introduced species. The Division does not recommend using this mix. The seed mix contains the following:

Species	Pounds PLS/sq.acre
Western wheatgrass	2
Basin wild ryegrass	1
Intermediate wheatgrass	2
Paiute orchardgrass	2
Rambler Alfalfa	1
Blueleaf aster	0.25
Lewis flax	0.5
Small burnet	1
Mountain big sage	0.25
Bitterbrush	1
TOTAL	11

Findings:

The Division considers the information adequate to meet the minimum requirements of the Revegetation section of the Reclamation Standards regulations. The Division, however, recommends that the Permittee recontour the site, but omit the seeding portion of the plan.

RECOMMENDATIONS:

Do not approve the Notice until the Permittee addresses all deficiencies.